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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,949	03/08/2004	Hidekazu Fukuda	JP920030015US1	1420
<div>26675 7590 02/04/2008</div> <div>Driggs, Hogg, Daugherty & Del Zoppo Co., L.P.A.</div> <div>38500 CHARDON ROAD</div> <div>DEPT. IRA</div> <div>WILLOUGBY HILLS, OH 44094</div>				
<div>EXAMINER</div> <div>KAO, WEI PO ERIC</div>				
<div>ART UNIT PAPER NUMBER</div> <div>2616</div>				
<div>NOTIFICATION DATE DELIVERY MODE</div> <div>02/04/2008 ELECTRONIC</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/795,949

Applicant(s)

FUKUDA, HIDEKAZU

Examiner

Wei-po Kao

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejection - 35 USC § 103

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez, U.S. Publication No 20020042706 in view of Dunne et al, U.S. Patent No 5740375.

Regarding Claim 1, Rodriguez discloses that a **broadcast processing system** (see Abstract, Figure 1 Element 10) **comprising: a first broadcast relay belonging to a first subnetwork** (see

Figure 1 Elements 101 and 103, Paragraph [0017]) **for, upon detecting a network-wide broadcast packet in the first subnetwork, generating a unicast address changed packet in which a destination address of the network-wide broadcast packet is changed to an address of a second broadcast relay belonging to a second subnetwork (see Figure 1 Elements 102, 104 and 108, Paragraph [0018] [0021-0024] [0028-0029] [0031-0033] e.g. [0029] line 5-8, [0033] line 8-10) and outputting the unicast packet inside the first subnetwork (see Figures 1 and 2 e.g. each gateway has ability to output a packet inside the subnetwork it belongs to); the second broadcast relay belonging to the second subnetwork for, upon receiving a packet addressed thereto, generating a first-type broadcast packet in which the destination address of the received packet is changed to the one related to a first-type broadcast, and outputting the first-type broadcast packet inside the second subnetwork (see Figure 1 Elements 102, 104 and 109, Paragraph [0019] [0021-0024] [0028-0029] [0031-0034] e.g. [0029] line 13-15).** However, Rodriguez does not disclose that **the system comprising: at least a first router for preventing a network-wide broadcast packet in a first subnetwork from reaching a second subnetwork which is different from the first subnetwork.** Dunne et al from the same field of endeavor disclose that **the system comprising: at least a first router for preventing a network-wide broadcast packet in a first subnetwork from reaching a second subnetwork which is different from the first subnetwork (see Abstract, Figures 8-10, Column 1 Line 35-48, Column 3 Line 28-32 62-67, Column 4 Line 1-2 22-27 46-67 i.e. according to column 4 line 65-69, the process of filtering/forwarding a valid network-wide broadcast packet to be transmitted across a subnetwork boundary ends, thus prevents the network-wide broadcast packet in a first subnetwork from reaching a second subnetwork, when the broadcast packet is**

not from a user-selected subnetwork; in another words, with Dunne's teaching, a router can be configured to prevent a network-wide broadcast packet from reaching a different subnetwork under necessary conditions). At the time of the invention, it would have been obvious to a person ordinary skill in the art to configure a router to prevent a network-wide broadcast packet from reaching a different subnetwork under necessary conditions. The rationale would have been that by configuring a router in a subnetwork to prevent network-wide broadcast packet from reaching a different subnetwork can help prevent the occurrence of broadcast storm.

Regarding Claim 2, Rodriguez discloses that **the system further comprising: the second broadcast relay generates (see Figure 2 Elements 102 and 104), upon detecting the unicast address changed packet in the second subnetwork, a unicast address changed packet in which a destination address of the network-wide broadcast packet is changed to an address of the first broadcast relay (see Figure 2 Elements 101, 103 and 112, Paragraph [0030-0033] e.g.) and outputs the address changed packet inside the second subnetwork (see Figures 1 and 2 i.e. each gateway has ability to output a packet inside the subnetwork it belongs to); the first broadcast relay generates, upon receiving a packet whose destination address is its own address, a first-type broadcast packet in which the destination address of the address changed packet is changed to the one related to a first-type broadcast and outputs the first-type broadcast packet inside the first subnetwork (see Figure 2 Elements 101, 103 and 113, Paragraph [0030-0034]).** However, Rodriguez does not disclose that **the system comprising: at least a second router for preventing a unicast address changed packet in the second subnetwork from reaching the first subnetwork.** Dunne et al from the same field of endeavor

disclose that **the system comprising: at least a second router for preventing an unicast address changed packet in the second subnetwork from reaching the first subnetwork** (see Abstract, Figures 8-10, Column 1 Line 35-48, Column 3 Line 28-32 62-67, Column 4 Line 1-2 22-27 46-67 i.e. according to column 4 line 65-69, the process of filtering/forwarding a valid network-wide broadcast packet to be transmitted across a subnetwork boundary ends, thus prevents the network-wide broadcast packet in a first subnetwork from reaching a second subnetwork, when the broadcast packet is not a broadcast packet, for instance an unicast packet; in another words, with Dunne's teaching, a router can be configured to prevent a packet from reaching a different subnetwork under necessary conditions). At the time of the invention, it would have been obvious to a person ordinary skill in the art to configure a router to prevent a packet from reaching a different subnetwork under necessary conditions. The rationale would have been that by configuring a router in a subnetwork to a packet from reaching a different subnetwork can help prevent the unnecessary traffic to attack a certain subnetwork.

Regarding Claim 3, Rodriguez further discloses that **the system wherein the first-type broadcast is a broadcast dedicated to the subnetwork in which it is outputted** (see Paragraph [0022] [0026]).

Regarding Claim 4, Dunne et al further disclose that **the system wherein the first subnetwork includes a router for preventing the unicast address changed packet in the first subnetwork from going out of the first subnetwork, and the second subnetwork includes a router for**

preventing the unicast address changed packet in the second subnetwork from going out of the second subnetwork (see Abstract, Figures 8-10, Column 1 Line 35-48, Column 3 Line 28-32 62-67, Column 4 Line 1-2 22-27 46-67 i.e. according to column 4 line 65-69, the process of filtering/forwarding a valid network-wide broadcast packet to be transmitted across a subnetwork boundary ends, thus prevents the network-wide broadcast packet in a first subnetwork from reaching a second subnetwork, when the broadcast packet is not a broadcast packet, for instance an unicast packet; in another words, with Dunne's teaching, a router can be configured to prevent a packet from reaching a different subnetwork under necessary conditions). At the time of the invention, it would have been obvious to a person ordinary skill in the art to configure a router to prevent a packet from reaching a different subnetwork under necessary conditions. The rationale would have been that by configuring a router in a subnetwork to a packet from reaching a different subnetwork can help prevent the unnecessary traffic to attack a certain subnetwork.

Regarding Claim 5, Rodriguez further discloses that **the system wherein the first and second subnetworks are interconnected via a subnetwork other than the first and second subnetworks, or the Internet** (see Paragraph [0018] [0021] [0025] [0027]).

Regarding Claim 6, Rodriguez further discloses that **the system wherein there exist a plurality of the second subnetworks having network addresses which are different from each other, the second broadcast relay exists in each second subnetwork, and upon detecting one network-wide broadcast packet, the first broadcast relay generates a plurality of address changed packets, from the network-wide broadcast packet, in which the destination**

address of the one network-wide broadcast packet is changed to the addresses of the respective second broadcast relays (see Figure 1 Elements 102, 103 and 108, Paragraph [0018] [0021-0024] [0028-0029] [0031-0033]) and outputs the plurality of address changed packets inside the first subnetwork (see Figures 1 and 2 e.g. each gateway has ability to output a packet inside the subnetwork it belongs to).

Regarding Claim 7, it is an apparatus claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 8, it is an apparatus claim corresponding to the system claim 3, and therefore rejected under the same reason set forth in the same section of claim 3 in this paragraph.

Regarding Claim 9, it is an apparatus claim corresponding to the system claim 5, and therefore rejected under the same reason set forth in the same section of claim 5 in this paragraph.

Regarding Claim 10, it is an apparatus claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 11, it is an apparatus claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 12, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 13, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 14, it is a method claim corresponding to the system claim 3, and therefore rejected under the same reason set forth in the same section of claim 3 in this paragraph.

Regarding Claim 15, it is a method claim corresponding to the system claim 5, and therefore rejected under the same reason set forth in the same section of claim 5 in this paragraph.

Regarding Claim 16, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 17, it is a method claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 18, it is an article claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Regarding Claim 19, it is an article claim corresponding to the system claim 1, and therefore rejected under the same reason set forth in the same section of claim 1 in this paragraph.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Referring to the PTO Form 892, references are cited to show a similar method of delivering broadcast packets among different subnetworks in a network.

7. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

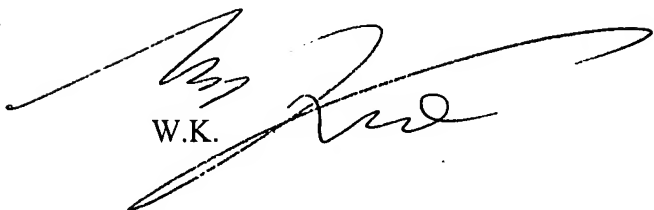
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wei-po Kao whose telephone number is (571)270-3128. The examiner can normally be reached on Monday through Friday, 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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W.K.



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SUPERVISORY PATENT EXAMINER